Appl. No. 10/764250

REMARKS

The following remarks are in response to the Office Action mailed on December 13, 2005. Claims 1-27 remain pending in this application. The Examiner rejected all of the claims under section 103. Response is hereby made to those rejections.

Claim 1 includes, *inter alia*, "a wire feed delay module, **having as an input a user trigger signal**, and having as an output the wire feed control output ... ". There are three features particularly relevant to the Examiner's rejection. First, there must be a wire feed delay module, i.e., a module that delays the wire feeding. Second, that module must have as an input a user trigger signal. Third, the delay module has as an output the wire feed control output. Similarly, claim 9 includes a "means for delaying the feeding of wire ... in response to a user trigger signal." Claim 19 likewise includes "sensing a user trigger signal .... upon the sensing, delaying feeding wire to an arc...".

Thus, each independent claims requires that in response to a user trigger signal, the feeding of wire is delayed. The claimed delay is not a delay in reaching a set speed, but **it is a delay in feeding the wire** ("wire feed delay" -- claim 1, "delaying the feeding of wire" -- claim 10, and "delaying feeding wire" -- claim 19.) As will be set forth in detail below, the prior art does not teach the feature of a **delay in feeding the wire**, alone or in combination.

Claims 1, 3, 10, 12, 13, 19, 21, and 27 were rejected under 35 U.S.C. 103(a) as being unpatentable over Ashton et al. (4,247,751). The Examiner held Figure 1 and 2 of the patent to Ashton et al. (4,247,751) taught a welding power supply. The Examiner further held the "acceleration circuit" discussed in columns 9 and 10 starts the wire feed motor in accordance with a predetermined acceleration curve, before the wire feed speed value set for welding is activated. The Examiner recognized that

Ashton et al. (4,247,751) failed to call for a delay associated with the wire feed, but then held it obvious that the acceleration control in Ashton et al. (4,247,751) constitutes a wire feed delay because this control acts to delay for a predetermined time period the onset of the previously set welding wire feed speed value.

Ashton et al. (4,247,751) teaches that to "improve arc starting" (Col. 9, line 31) the wire feed motor should immediately begin accelerating. It does not teach to **delay the wire feeding**, rather to control the acceleration. In other words it teaches to **delay reaching the set speed**. This is not a delay in feeding, as required by the claims. To restate, there is a difference between the claimed **delay in feeding** and the prior art **delay in reaching a set speed.**

A simple analogy to cars illustrates the difference. Feeding wire is analogous to the car moving, and wire feed speed is analogous to the car's speed, and the trigger is stepping on the accelerator. The claimed invention is **delaying the feeding.** Thus, an analogous feature would be that when the driver steps on the accelerator, there is a delay in the car moving. The prior art teaches to control the acceleration, but feeding begins immediately. Thus an analogous feature is the car immediately moves when the accelerator is depressed, but the rate of acceleration is limited. Clearly, moving forward with a low acceleration is not the same as not moving.

Likewise, **delaying the feeding** as claimed is not the same as the taught **delaying the reaching of a set speed.** Accordingly, claims 1, 10, and 19 are allowable, as are all of the dependent claims.

While the remaining rejections are moot, given that Ashton fails to teach delaying the wire feeding the rejection of claims 2, 11 and 20 will be addressed. Claims 2, 11, and 20 rejected under 35 U.S.C. 103(a) as being unpatentable over Ashton

et al. (4,247,751) in view of Chopp et al. (3,546,423). The Examiner relied on Chopp et al. (3,546,423) to teach a delay of between 5 and 50 milliseconds between the contact of an electrode with a workpiece and the start of wire feed speed is useful (see column 3, lines 35-40 in Chopp et al. (3,546,423)).

Even if Ashton taught **delaying the feeding** (which it does not), Chopp teaches to delay at the start of the arc -- not in response to a user trigger. Thus, their combination falls short of claims 2, 11, and 20.

Accordingly, in view of the above amendments and remarks, Applicants respectfully submit that the application should be allowed. The Examiner is invited to telephone the undersigned below if it will aid in the prosecution of this application.

Respectfully Submitted

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